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EXAMINER
ADEGORUSI, ADEKUNLE O

ART UNIT	PAPER NUMBER
2153	7

DATE MAILED: 04/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PRG

Office Action Summary	Application No.	Applicant(s)	
	09/625,842	MUTO, SHIN	
	Examiner	Art Unit	
	Adekunle O Adegorusi	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, 15 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Grau et al. (US Patent 5,910,803).

3. Regarding claim 1, Grau et al. teaches an information processing apparatus (management console node) that receives from a different apparatus (management server node) which searches (collects) for apparatuses in a system (see column 4, lines 17-23), search results that include location information (topology) concerning the hierarchical locations of the apparatuses (column 4, lines 7-12 and fig. 6). The information processing apparatus has control means (graphical user interface) for displaying a hierarchical location relationship in accordance with the hierarchical location information (column 5, lines 10-19 and see abstract, last 5 lines).

4. Regarding claim 3, Grau et al. teaches that the search results (retrieved topology data) include a plurality of sets of map data (selected maps) that corresponds to the hierarchical-type location information that hierarchically represent information concerning locations of apparatuses (column 5, lines 10-25 and fig. 6).

5. In considering claims 15 and 18, Grau et al. teaches a method of controlling an information processing apparatus, which comprises of receiving from a different apparatus that is capable of searching for apparatuses in a system, search results that include location information concerning the hierarchical locations of the apparatuses (column 4, lines 14-17 and column 5, lines 19-25) and the method of displaying a hierarchical location relationship for apparatuses in accordance with the hierarchical location information (column 4 lines 1-17).

6. Regarding claim 18, Grau et al. also teaches a storage medium (memory) that has a program stored on it (operating system) to control an information processing apparatus (column 3 lines 38-42) which has a reception step that receives from a different apparatus that is capable of searching for apparatuses in a system, search results that include location information concerning the hierarchical locations of the apparatuses (column 4, lines 14-17 and column 5, lines 19-25) and the method of displaying a hierarchical location relationship for apparatuses in accordance with the hierarchical location information (column 4 lines 1-17).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grau et al., and further in view of Sugauchi et al. (U.S. Patent 6,049,827). The system disclosed by Grau et al. (discussed above) fails to teach the storage means on the receiving apparatus that stores a plurality of sets of map data, corresponding to hierarchical-type location information, that hierarchically represents information concerning the locations of apparatuses in the system and a control means for displaying the hierarchical location relationship based on the map data stored in the storage means and the location information received by the reception means.

However, Sugauchi et al. in a similar field of endeavor teaches a management system for managing a network (column 1, lines 8-16). Sugauchi et al. further teaches an apparatus that displays a map that hierarchically represents the configuration of the network that is based on information that is stored in the management information table (column 9, lines 25-30).

It would have been obvious to one with ordinary skill in the art to modify the teachings of Grau et al. with the teachings of Sugauchi et al. by making the receiving apparatus i.e. the apparatus that receives the search results, have a means for storing sets of map data and also have the means to be able to display the hierarchical location relationship based on the map data. This would conserve network bandwidth since the whole map data would not be sent but just part of the map data like the location information.

9. Claims 4, 5 and 11-14, 16-17 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grau et al., and further in view of Bahlmann (U.S. Patent 6,393,478).

10. In considering claims 4 and 5, the system disclosed by Grau et al. (discussed above) fails to explicitly teach the designation of a search and display range when a request for a search is

transmitted to another apparatus and Grau also failed to teach a notification means for notifying the other apparatus of user information and receiving search results in accordance with user information.

However, Bahlmann teaches a method of troubleshooting devices (an example of network management) on a network (column 2 lines 26-29) and designating a search range (search by city) for the area that the search should cover (see figures 3 and 4 and column 9 lines 40-64). Bahlmann also teaches a display range designation means (this is the means by which the system limits the size of the search result if the list is more than two) for designating a display range before data is displayed (see figure 4 and column 10 lines 19-32) and notifying means for notifying the other apparatuses of user information (customer name) and the means for receiving search results in accordance with the user information (column 9 lines 40-64 and column 10 lines 19-32).

Having search range designation means and display range designation means in order for the system to be able to focus on a certain area and to make it possible to display a reasonable amount of information on the user's screen would have been a desirable feature in the art. Thus, it would have been obvious to one with ordinary skill in the art to modify the teachings of Grau et al. with the teachings of Bahlmann by creating the means for the system to search for network devices by specifying a range and having a display range designation means in order to focus on a certain area and to make it possible to display a reasonable amount of information on the user's screen.

Furthermore, it would have been obvious to one with ordinary skill in the art to modify the teachings of Grau et al. with the teachings of Bahlmann by creating a means to notify another

apparatus of user information and having a reception means for receiving the search results according to the user information. This would make the user of the information processing apparatus receive information that pertains to its system.

11. In considering claim 11, Grau et al. teaches an information processing apparatus, which is capable of searching for apparatuses in a system, comprising: the means for managing location information (topology data) that hierarchically represents the locations of apparatuses in the system (column 4 lines 7-10 and lines 13-17); the means for storing (topology database) a plurality of sets of map data for individual ranks (the hierarchical collection of network maps implies that the network maps have ranks) in order to hierarchically represent the locations of apparatuses (column 4 lines 7-12 and lines 13-17); the means for searching by including hierarchical information that indicates a rank for which the different apparatus and displaying the result (column 4 lines 14-17 and column 5 lines 19-25; retrieving the selected maps implies a search that was done requiring hierarchical information that indicates a rank to be included);

the means for selecting map data in accordance with the search results obtained by the search means and the hierarchical information received by the reception means and for transmitting the map data to the different apparatus (column 5 lines 19-25; the atlas viewer is in the management console node while the atlas manager is in the management server node).

Grau et al. does not explicitly teach the means for receiving from a different apparatus, a search condition that includes location information concerning the location of an apparatus to be searched for, and the location information managed by the management means.

However, Bahlmann teaches the means for receiving from a different apparatus, a search condition that includes location information (search by city) concerning the location of an apparatus to be searched for (column 9 lines 51-55) and displays the search results (column 10 lines 27-30). Bahlmann also teaches the management means for managing the location information in the tool database, which is in the host computer (column 6 lines 29-30 and column 10 lines 14-19).

It would have been obvious to one with ordinary skill in the art to modify the teachings of Grau et al. with the teachings of Bahlmann by including information about the location of an apparatus. This would enable the user of the system narrow down the amount of results that the system would produce.

Furthermore, it would have been obvious to one with ordinary skill in the art to modify the teachings of Grau et al. with the teachings of Bahlmann by making it possible to have the location information managed by the management means which would enable an apparatus access information in a time-efficient manner.

12. In considering claim 12, Grau et al. teaches a system that comprises a plurality of information processing apparatuses, wherein a first information processing apparatus is capable of searching for apparatuses in a system and includes management means, for managing location information that hierarchically represents locations of apparatuses in the system (column 4 lines 1-12),

searching (retrieving) for information in the apparatus (atlas manager); the information includes location information concerning the hierarchical location of the apparatuses (topology

data) (column 5 lines 15-25); and the second information processing apparatus (atlas viewer in the management console node) has the means for receiving the search results from the first information processing apparatus (column 5 lines 19-22; searching would have been done in order to retrieve information from a system) and the means for displaying a hierarchical location relationship of the apparatuses in accordance with the location information that is included in the search results received by the reception means (the topological data received displays a hierarchical location relationship (see column 4 lines 1-12 and column 5 lines 19-25)).

Grau et al. does not teach performing a search including location information for an apparatus to be searched for, however, Bahlmann teaches the inclusion of location information for an apparatus to be searched for (column 9 lines 51-55).

It would have been obvious to one with ordinary skill in the art to modify the teachings of Grau et al. with the teachings of Bahlmann by making it possible to search for the location of the apparatus in order to narrow down the amount of results that the system would produce.

13. In considering claim 13, Grau et al. teaches a first information processing apparatus that includes management means, for managing location information that hierarchically represents the locations of apparatuses in the system (column 4, lines 1-12).

Grau et al. does not teach receiving a search condition from the second information processing apparatus that includes location information and user information concerning the location of an apparatus to be searched for, and searching based on location information that is managed by the management means.

However, Bahlmann teaches receiving a search condition from another apparatus that includes location information of an apparatus (search by city) and includes the user information (column 9, lines 51-55). Bahlmann also teaches that the location information is managed by a management means (column 10, lines 14-19).

It would have been obvious to one with ordinary skill in the art to modify the teachings of Grau et al. with the teachings of Bahlmann by making it possible to search for user information and location information that is managed by a management means. This would make it possible to obtain the requested information in a time efficient manner.

14. In considering claim 14, Grau et al. teaches a first information processing apparatus that includes management means, for managing location information that hierarchically represents the locations of apparatuses in the system (column 4, lines 1-12).

Means for storing a plurality of sets of map data for individual ranks in order to hierarchically represent the locations of apparatuses (column 4, lines 1-17; hierarchically representing an object implies the ranking of an object). Grau et al. also teaches the selecting of map data in accordance with the search results (retrieving topological data) obtained by the search means and the hierarchical information received by the reception means, and for transmitting the map data to the second information processing apparatus (column 5, lines 19-25).

Grau et al. also teaches that the location information is managed by a management means (column 4, lines 14-17).

Grau et al. does not teach a search condition that includes location information concerning the location of an apparatus to be searched, however, Bahlmann teaches including a search condition that has location information (search by city) concerning the location of an apparatus to be searched (column 9 lines 51-55) and also teaches the management of location information (column 10 lines 14-19).

It would have been obvious to one with ordinary skill in the art to modify the teachings of Grau et al. with the teachings of Bahlmann by making it possible to search for location information that is managed by a management means. This would make it possible to obtain the requested information in a time-efficient manner.

15. In considering claim 16, Grau et al teaches a method and a computer-readable program for managing location information that hierarchically represents the locations of apparatuses in the system (column 4 lines 1-17). Grau et al. also teaches a storage medium (memory) that has a program stored on it (operating system) to control an information processing apparatus (column 3 lines 38-42).

Grau et al. does not explicitly teach a reception step of receiving from a different apparatus, a search condition that includes location information concerning the location of an apparatus to be searched for and searching based on location information received at the reception step, on user information provided by a user of the different apparatus and on the location information managed at the management step.

However, Bahlmann teaches a method of receiving from a different apparatus a search condition that includes location information (column 9 lines 51-55: a search by city) and a

method of searching for the apparatus based on the location information which is managed by a management means (column 10 lines 14-19; the tool database which stores the information about apparatuses (cable modems) is managed by the tool application program which is in the host computer (column 6 lines 17-30)).

It would have been obvious to one with ordinary skill in the art to modify the teachings of Grau et al. with the teachings of Bahlmann by incorporating the means for searching by including location information and having the location information managed by a management means in order to the user search for apparatuses in a time-efficient manner.

16. In considering claim 17, Grau et al. teaches a method for controlling (a network mapping tool is used for providing a network management services (column 3, line 66 – column 4, line 7)) an information processing apparatus (management console node that has an atlas viewer that retrieves topology data from the atlas manager which is in the management server node) that is capable of searching (column 4 lines 1-12 and column 5 lines 19-22; the retrieval process requires searching) for apparatuses in a system. The controlling method further comprises a management step of managing location information that hierarchically represents the locations of apparatuses in the system (column 4 lines 14-17), a storage step of storing a plurality of sets of map data for individual ranks in order to hierarchically represent the locations of apparatuses (column 4 lines 14-17; the topology data that is stored in the topology database is stored hierarchically which implies that the map data is ranked (column 4 lines 7-10)). Grau et al. also teaches selecting map data according to search (retrieved) results obtained at the search step and the hierarchical information received at the reception step (column 5 lines 10-25).

Grau et al. fails to explicitly teach a search condition that includes location information concerning the location of an apparatus to be searched for, the method of searching for the apparatus based on the location information and the managing of location information however, Bahlmann teaches including a search condition that has location information (search by city) concerning the location of an apparatus to be searched (column 9 lines 51-55) and also teaches the management of location information (column 10 lines 14-19).

It would have been obvious to one with ordinary skill in the art to modify the teachings of Grau et al. with the teachings of Bahlmann by making it possible to search for location information that is managed by a management means. This would make it possible to obtain the requested information in a time-efficient manner.

17. In considering claim 19, Grau et al teaches a computer-readable program for managing location information that hierarchically represents the locations of apparatuses in the system (column 4 lines 1-17). Grau et al. also teaches a storage medium (memory) that has a program stored on it (operating system) to control an information processing apparatus (column 3 lines 38-42).

Grau et al. does not explicitly teach a program that controls an apparatus and capable of searching for apparatuses in the system, a reception step of receiving from a different apparatus, a search condition that includes location information concerning the location of an apparatus to be searched for and searching based on location information received at the reception step, on user information provided by a user of the different apparatus and on the location information managed at the management step.

However, Bahlmann teaches a program (tool application program) that controls an apparatus (column 6 lines 17-25, the host computer which is the management system is built around a tool application program) and capable of searching for apparatuses in the system (column 9 lines 29-31), a method of receiving from a different apparatus a search condition that includes location information (column 9 lines 51-55; a search by city) and a method of searching for the apparatus based on the location information which is managed by a management means (column 10 lines 14-19; the tool database which stores the information about apparatuses (cable modems) is managed by the tool application program which is in the host computer (column 6 lines 17-30)).

It would have been obvious to one with ordinary skill in the art to modify the teachings of Grau et al. with the teachings of Bahlmann by having a program that controls an apparatus and capable of searching for apparatuses in order to have enough memory to accomplish additional task in the network.

Furthermore, it would have been obvious to one with ordinary skill in the art to modify the teachings of Grau et al. with the teachings of Bahlmann by incorporating the means for searching by including location information and having the location information managed by a management means in order to the user search for apparatuses in a time-efficient manner.

18. In considering claim 20, Grau et al. teaches a method and a computer-readable program for controlling (a network mapping tool is used for providing a network management services (column 3, line 66 – column 4, line 7)) an information processing apparatus (management console node that has an atlas viewer that retrieves topology data from the atlas manager which

is in the management server node) that is capable of searching (column 4 lines 1-12 and column 5 lines 19-22; the retrieval process requires searching) for apparatuses in a system. The controlling method further comprises a management step of managing location information that hierarchically represents the locations of apparatuses in the system (column 4 lines 14-17), a storage step of storing a plurality of sets of map data for individual ranks in order to hierarchically represent the locations of apparatuses (column 4 lines 14-17; the topology data that is stored in the topology database is stored hierarchically which implies that the map data is ranked (column 4 lines 7-10)). Grau et al. also teaches selecting map data according to search (retrieved) results obtained at the search step and the hierarchical information received at the reception step (column 5 lines 10-25).

Grau et al. fails to explicitly teach a program that controls an apparatus and capable of searching for apparatuses in the system, a search condition that includes location information concerning the location of an apparatus to be searched for, the method of searching for the apparatus based on the location information and the managing of location information however, Bahlmann teaches a program (tool application program) that controls an apparatus (column 6 lines 17-25; the host computer which is the management system is built around a tool application program) and capable of searching for apparatuses in the system (column 9 lines 29-31) and the inclusion of a search condition that has location information (search by city) concerning the location of an apparatus to be searched (column 9 lines 51-55) and also teaches the management of location information (column 10 lines 14-19).

It would have been obvious to one with ordinary skill in the art to modify the teachings of Grau et al. with the teachings of Bahlmann by having a program that controls an apparatus and

capable of searching for apparatuses in order to have extra memory to accomplish other management task in the network.

Furthermore, it would have been obvious to one with ordinary skill in the art to modify the teachings of Grau et al. with the teachings of Bahlmann by making it possible to search for location information that is managed by a management means. This would make it possible to obtain the requested information in a time-efficient manner.

19. Claims 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bahlmann (U.S. Patent 6,393,478) and further in view of Grau et al.

20. In considering claim 6, Bahlmann teaches an information processing apparatus (host computer) that searches for apparatuses in a system (cable modems in a network), comprising of a management means, for managing information (stores data about devices in a tool database) that represents the apparatuses in the system (column 6, lines 17-30). Bahlmann also teaches the reception of a search condition that includes location information (search by city) concerning the location of an apparatus to be searched for (column 9, lines 40-55) and the means for searching based on location information received by the reception means (column 9, lines 51-55), on user information (customer name) provided by a user for a different apparatus (cable modem) (column 9, lines 49-51) and on location information managed by the management means (column 9, lines 51-55).

Bahlmann does not explicitly teach managing location information that hierarchically represents the locations of apparatuses in a system, however, Grau et al. teaches a client (management console node) that interacts with a server (management server node) which

collects, organize and record topology data and atlas data in a topology database. The topology data is displayed as a hierarchical collection of network maps (column 4 lines 7-17).

Managing location information that hierarchically represents the locations of apparatuses in a system in order to search and retrieve information based on the location of the device in a time-efficient manner would have been a desirable feature in the art. Thus, it would have been obvious to one with ordinary skill in the art to modify the teachings of Bahlmann with the teachings of Grau et al. by incorporating the means to hierarchically organize information into the management system (troubleshooting system) in order to search and retrieve information based on the location of the device in a time-efficient manner.

21. In considering claim 7, Bahlmann teaches that the search means limits the apparatuses to be searched (limiting cable modem searches by specifying the cable modem type) for in accordance with the user information (column 9 lines 48-51).

22. In considering claim 8, Bahlmann teaches that the search means limits the locations to be searched (limiting cable modem searches by specifying the city to search) for in accordance with the user information (column 9 lines 51-56).

23. In considering claim 9, Grau et al. teaches the transmission of search results that are obtained by searching (retrieving) to the requesting apparatus, where the search results include location information that hierarchically represents the locations of the apparatuses (column 5 lines 10-25).

24. In considering claim 10, Grau et al. teaches a storage means (column 4 lines 13-16) for storing a plurality of map data that corresponds to the location information (topography and atlas data) that hierarchically represents information concerning the locations of apparatuses, the

means to transmit the search results to the different apparatus (atlas viewer) and the search results that are transmitted include the map data that are consonant with the search results (column 5 lines 19-22; the atlas viewer is in the management console station while the atlas manager is in the management server station).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adekunle O Adegorusi whose telephone number is (703) 305-7721. The examiner can normally be reached on 8:30 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703) 305-4792. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-8889 for regular communications and (703) 746-8889 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is N/A.

AOA
April 15, 2003

GLENTON B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100